

Message

From: EPAResearchCompass [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C1E8F11508674C3C954553A1129D33E5-EPARESEARCH]
Sent: 5/22/2018 8:49:53 PM
To: ORD-ALL Feds and NonFeds and RSLs [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=2c735272eef941588aefd9a05ed28823-ORD-ALL Feds and NonFeds and RSLs]
CC: Lincoln, Larry [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8248d03a1441414db7754db201ebec45-Lincoln, Larry]; Barnett, Felicia [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5773b45cae5142fe950861dd6146f1e9-Barnett, Felicia]; Carter, Bobbi [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f16dcafe85fc418ebd1651be2e8ab82d-Carter, Bobbi]; Gettle, Jeaneanne [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d8e72aa7e1894faea44006fd9f22b637-Gettle, Jeaneanne]; Taylor, Dawn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b984d00ec06544e498ee5d986f97047c-Taylor, Dawn]; Klinger, Adam [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=346d5466632f4967adc7169c8d2ce4fd-Klinger, Adam]; Liljegren, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=c7098a838cd34f75b8878571fe95d939-JLiljegr]; Pollard, Solomon [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=16cdf700f8024145847a2770b84abae3-Pollard, Solomon]; Clarage, Meredith [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ee9504437be545489f518710a5e80e68-Clarage, Meredith]; Fan, Shirley [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=cdeba1df9599435cb7401d0a65be7cda-Sfan02]
Subject: Weekly Compass: May 22, 2018



Weekly Update: 5/22/2018

Welcome to the Weekly Compass, your gateway to information about recent and upcoming ORD activities. If you have ideas for the Weekly Compass, please send them to the editors. To see past issues, visit the Weekly Compass archive on ORD@work.

Weekly Note from Jennifer

ORDers - First, I want to commend everyone for their commitment to getting datasets uploaded through ScienceHub for recent publications. Thank you for focusing on this important effort.

This week, Chris Robbins and I are visiting our lab in Gulf Breeze, FL where we are hosting the Environmental Research Institute of States (ERIS) board meeting. In addition, representatives from the Mississippi Department of Environmental Quality will also visit ORD's Gulf Ecology Division in Gulf Breeze on Thursday.

Also this week, Richard Yamada, Bruce Rodan, and Andy Gillespie will represent ORD at EPA's National Leadership Summit on PFAS. The opening presentations from 8:30 to 9:40 ET this morning were livestreamed and the video recording has been posted.

Thank you to NERL's Armah de la Cruz for sending in our first personal celebration highlight, and congratulations to you and your family on your son's acceptance into a Medical Scientist Training Program! Check out the write-up below.

No matter how you celebrate Memorial Day, I wish you all a safe and wonderful weekend. -
Jennifer

Quick Updates

- Before heading outside this holiday weekend, remember that Friday is "Don't Fry Day." EPA's UV Index Mobile App helps show the danger of exposure to the sun's cancer-causing ultraviolet (UV) rays, and gives daily as well as hourly UV intensity forecasts for your location and provides recommendations on sun safety.
- As part of the agency's recognition of Asian-American and Pacific Islander (AAPI) Heritage Month, EPA is showcasing an AAPI career profiles page. The page includes a profile of NHEERL's Alejandro "Alex" Almario.
- The EPA Diversity Dashboard: First Quarter 2018 Report is now available.
- Proposals for internal RFP for Pathfinder Innovation Projects (PIP7) are due on May 25th.
- EPA announced the release of its National Priorities: Per- and Polyfluoroalkyl Substances (PFAS) Request for Application (RFA), it closes on June 18
- It's time to vote for your favorite Sammies finalist from the 27 outstanding honorees, including ORD's Gerald (Gary) Ankley. Be sure to vote often through July 9. The People's Choice winner will be announced on July 19.
- FY18 Information Security and Privacy Awareness Training is due by August 31
- *No Fear Act Training, COOP Training, FOIA Training, and Records Management Training are now available, training must be done by September 30*
- You should have received the 2018 Employee Viewpoint Survey from OPM. The voluntary and confidential survey takes approximately 25 minutes to complete and is due June 12. Please look for an email from EVEP@opm.gov to complete the survey. Please contact Engagement@EPA.gov if you have any questions. For past years results, please visit EPA's EVS SharePoint site.
- If you're in DC, sign up to be a member of the diversity and inclusion focus group.
- Don't forget to check out the open opportunities on Talent Hub!
- You can read the This Week @ EPA newsletter [here](#).

- Upcoming webinars:
 - A-E/SSWR/OAR-OAQPS Seminar/Webinar: Is Nitrogen the Next Carbon? Wednesday, May 23, 11-12 ET
 - IRIS Public Science Meeting on Ammonia Webinar, Wednesday, May 23, 1-3 ET
 - CompTox Communities of Practice: ECOTOX Knowledgebase- New Tools and Data Visualizations: Thursday, May 24, 11-12 ET
 - New Insights in Atmospheric Science Seminar Series: Tuesday, May 29, 10 ET
 - Tools for Assessing Lakes and Streams: Lake-Catchment (LakeCat) and Stream-Catchment (StreamCat) Datasets: Wednesday, May 30, 2-3 ET
 - Small Water Systems Research Webinar: Conventional Treatment Options for Harmful Algal Blooms: Tuesday, June 5, 2-3:30 ET

Faces of ORD: IOAA's Danielle Pope

In the Lab:

Ken Wagner Visits RTP

Ken Wagner, the Administrator's Senior Advisor for Regional and State Affairs, came to RTP last Wednesday for a campus tour to see how ORD research supports the states. Below are a few pictures from his visit.



Wildfires and Public Health/Smoke Sense Demo Session: L to R: Chris Robbins, NHEERL's Wayne Cascio, and Ken Wagner. Wayne is providing an overview of EPA's wildland fire research and resources.



L to R: Ken Wagner, Ian Gilmour, and Wayne Cascio. Ian is giving Ken a tour of the Multi-pollutant emissions, exposures and effect lab with a focus on wildland fire.

ACC Long-Range Research Initiative Strategic Science Team Meeting

Last week, CSS' Jeff Frithsen and two senior scientists from OCSPP met with the American Chemical Council Long-Range Research Initiative (LRI) Strategic Science Team. EPA provided an overview of efforts to improve chemical safety evaluation approaches through the implementation of new approach methodologies (NAMS), omics and prediction modeling. The information exchange will help ACC better understand where to focus long-term research activities and inform development of the ACC long-term initiative 5-year research strategy. The LRI Strategic Science Team includes scientists from ACC member companies and also includes public members including retired EPA scientists Larry Reiter and Vicki Dellarco.

Advising Texas on Coastal Community Disaster Response

Last week, NHEERL's Lisa Smith served as a socio-ecological indicators expert on an interdisciplinary, interagency team advising Texas OneGulf, which was established by the Texas Center of Excellence after the Deepwater Horizon disaster. It is led by Texas A&M University's Harte Research Institute. This workshop supports an effort, sponsored by the Texas Governor's office, to assess local and regional impacts of environmental stressors and disasters on Gulf coast communities by connecting the health of coastal environments to coastal community well-being. Experts are reviewing socio-economic data and information needs, recommending socio-economic indicators to be used in adaptive management, and ranking utility and transferability of socio-economic indicators.

Environmental Research Institute of the States Board-EPA Joint Meeting

Today and tomorrow, ORD will host a joint meeting with the Environmental Research Institute of the States (ERIS) Board at ORD's Gulf Ecology Division (GED) in Gulf Breeze, FL. In addition to the ERIS Board members, ECOS Vice President and Director, Arkansas DEQ Becky Keogh, EPA Office of Water and EPA Region 4 will participate. Agenda topics include cooperative federalism, EPA's Science Inventory database (to help ensure that ORD's scientific findings and tools are more accessible to states and the public), ORD research on perfluorinated chemicals, state engagement in the development of ORD's Strategic Research Action Plans refresh, planning for the 2018 ERIS state research needs survey, and progress made on implementing our state engagement work plan. On the afternoon of the first day, NHEERL GED scientists will present on some of their innovative research related to nutrients and coral reefs, as well as the Climate Resilience Screening Index (CRSI), followed by a lab tour.

Mississippi Department of Environmental Quality Visit to ORD's Gulf Ecology Division

On Thursday, Mississippi Department of Environmental Quality (MDEQ) officials will visit EPA's Gulf Ecology Division in Gulf Breeze, FL. MDEQ's Office of Pollution Control attendees include Director Chris Sanders, Surface Water Division Chief Mike Freiman, and Field Services Division Chief Doug Upton. The visit is for ORD to gain further insight into the state's most pressing environmental challenges and related science needs. In addition, the visit will provide an opportunity for MDEQ to learn more about EPA research, science and technical capabilities, meet ORD scientists and see first-hand some of the innovative work being done by ORD researchers. This visit will include a half-day meeting with a lab tour and presentations focused on topics of interest to Mississippi including nutrients, emerging water quality techniques, and quantifying water quality response to reduce nutrient loads with the Coastal General Ecosystem Model (CGEM). The facility tour will highlight labs (wet, coral and proteomics) and EPA's diver training program.

EnviroAtlas Adds Six New Urban Areas

ORD's EnviroAtlas tool has added fine-scale data and maps for six new urban areas: Baltimore, MD; Birmingham, AL; Brownsville, TX; Chicago, IL; New Haven, CT; and Virginia Beach/Williamsburg, VA. Stakeholders can learn more about them through the EnviroAtlas Communities site and access the data through the EnviroAtlas Interactive Map. EnviroAtlas is a web-based tool that combines maps, analysis tools, and interpretive information on ecosystem services. States, communities, and citizens can use this information in making decisions that affect policies and planning. EnviroAtlas presents data at a national scale and an urban/community-scale. The urban/community information currently includes fine-scale data for more than 950 U.S. cities and towns around 24 urbanized community areas. This urban/community information can be used to inform decisions surrounding urban planning, transportation, children's health, green infrastructure, parks, greenways, and more. The six new areas will be publicly announced this week with an article in ORD's Science Matters online newsletter and via EPA research social media platforms.

Enhancing Public Health Response During Disasters

Last week, NHEERL Director Wayne Cascio participated at the National Disaster Epidemiology Workshop in Atlanta, Georgia. This annual meeting, co-sponsored by the Centers for Disease Control and Response, and the Council of State and Territorial Epidemiologists, shares information and best practices to improve hazard preparedness and response capacities at all levels. Cascio shared recent research about wildland fires and their emissions, what we know about individuals and communities most at risk, and resources available for leaders, responders, health officials, and individuals to take preventive actions to protect themselves. Emergency managers, local public health preparedness coordinators, and academics participated with epidemiologists at this meeting.

National Tribal Public Health Summit

This week, Cynthia McOliver and Fred Hauchman (OSP) are attending the Annual National Tribal Public Health Summit, hosted by the National Indian Health Board in Prior Lake, Minnesota. They will participate in a roundtable session, demo ORD tools, and discuss Tribal-focused research and technical projects.

Watershed Integrity Research

A paper with coauthors from NHEERL, NRMRL, NCEA, NERL, and academia, recently published, "Performance of National Maps of Watershed Integrity at Watershed Scales," in *Water*. This paper describes an approach to characterizing watershed integrity based on various landscape and in-stream metrics. The East Fork watershed (located near Cincinnati, OH) was one of four watersheds investigated in the paper.

Stormwater Runoff and Green Infrastructure

NRMRL's Chris Nietch published the paper, "Drainage area characterization for evaluating green infrastructure using the Storm Water Management Model," in *Hydrology and Earth System Sciences*. The paper describes an approach to characterizing drainage area for green infrastructure modeling, which is important in determining urban stormwater runoff quality and quantity.

Site Visit to Eagle Industries Superfund Site, Midwest City, OK

Last week, at the request of Region 6 and Oklahoma Department of Environmental Quality, NRMRL's Randall Ross and Steve Acree demonstrated techniques for determining spatial and temporal variations in groundwater flow directions at the Eagle Industries site. Soil and groundwater at the site are known to be contaminated with chlorinated solvents formerly used for degreasing during facility operations.

PFBS Toxicity Assessment Release

Last week, NCEA released its draft PFBS toxicity assessment, along with the Office of Water's (OW) GenX assessment, for a two-week agency and interagency review prior to external peer review. This will be followed by a meeting with federal partners to discuss their comments and EPA's revisions.

Drinking Water Treatment Pilot Demonstration, Plainville, MA

Last week, NRMRL's Nick Anastas visited the Plainville Drinking Water Treatment Plant to observe a new pilot project using ferrate as a disinfectant. The goal of the project is to use ferrate peroxidation as an alternative disinfectant to chlorine, thereby reducing disinfection byproducts. Representatives from University of Massachusetts-Amherst, Massachusetts Department of Environmental Protection, and treatment operators are part of the effort and will be present.

Final ISO Standard Approved for Laboratory Testing of Cookstoves

This final ISO standard approval is the culmination of a three-year process requiring consensus among more than 100 international experts from 21 participating countries. The standard was developed with NRMRL leadership, in partnership with OAR, and with critical support from NRMRL's Household Energy Research Laboratory located in RTP, NC. NRMRL and OAR also worked closely with the Working Group Convener, Richard Ebong, of the Uganda National Bureau of Standards. Voting closed on May 7, resulting in ISO approval of the final standard. The new standard (ISO 19867-1) includes harmonized methods for evaluating performance of cookstoves and will provide incentives for developing improved technologies.

Drinking Water Systems Presentation at German Embassy in DC

NRMRL's Vicente Gomez-Alvarez presented, "Drinking Water Systems: Methods and Applications" at a meeting at the German Embassy in DC intended to promote information sharing and networking. The meeting was organized by the German Environment Agency, Secretary for Science and Technology at the Embassy of the Federal Republic of Germany, University of Maryland, and Joseph Cotruvo & Associates. U.S. water utilities and the Germany Environment Agency are very interested in the use of next generation sequencing technology for research and monitoring of their drinking water distribution systems.

Thyroid Hormone Analysis

NCEA's Sue Makris is co-author of a paper, "The urgency for optimization and harmonization of thyroid hormone analyses and their interpretation in developmental and reproductive toxicology studies," which was posted online in *Reproductive Toxicology* on May 2nd. The paper, the product of a European Teratology Society (ETS) working group, emphasizes the need for robust methodologies and validation procedures for thyroid hormone assessment in pre- and postnatal rodent toxicology studies, and describes several on-going activities in this field.

Region 2 Support

The Superfund Health Risk Technical Support Center (STSC) responded to a request from Region 2 for assistance in identifying an appropriate surrogate for 2-aminopyridine (CASRN 504-29-0) for the evaluation of oral noncancer toxicity. NCEA scientists applied an expert-driven read-across approach to determine the suitability of identified potential surrogate chemicals based on three similarity contexts (structure, toxicokinetics, and toxicity). The NCEA scientists managing the request discussed the response with the requesting Region 2 risk assessors last week.

'Evidence Exchange' Initiative with Freshwater Science Journal

This week, an NCEA-led team, with collaborators from Australia and the UK, is launching a new initiative at the Society for Freshwater Science conference in Detroit, MI. The initiative will collect metadata and research results from published articles in the *Freshwater Science* journal upon final submission, and link these to public databases to make findings more readily available for evidence synthesis and environmental decision making. EPA authors include Sue Norton, Kate Schofield, Micah Bennett, Sylvia Lee, Caroline Ridley, and David Gibbs.

Grantee Publication on Forward Osmosis

Jeff McCutcheon, lead Principal Investigator on a 2009 water infrastructure sustainability grant recently published in the *Journal of Membrane Science* on how temperature gradients can impact performance of forward osmosis (FO). FO, a promising technology used for desalination, water reuse, and dewatering, requires an osmotic pressure gradient to induce flow through a semipermeable membrane (in contrast to reverse osmosis that uses pressure). The results showed the impacts of deviating from ideal temperature in FO systems and specifically showed that water flux direction and feed solution temperature had profound impact on membrane performance. This understanding should be useful as FO systems are refined and optimized for potential commercialization.

Grantee Publication on Overheating Inside Buildings

Overheating inside buildings can reach levels associated with health impacts during heat wave episodes, and is more likely in older buildings despite trade-offs made to achieve energy efficiency in newer buildings. Researchers at the University of Arizona simulated power-failure conditions in residential buildings in Houston and Phoenix, based on models from the Energy Efficiency & Renewable Energy Office of U.S. DOE. Energy efficiency improvements (such as reducing air infiltration) improved the ability of the building to maintain comfortable conditions indoors, while in the older simulated buildings, discomfort reaches a critical level in about 6 hours. Strategies vary in effectiveness in different climates (such that reducing infiltration is more effective in Phoenix than in Houston) highlighting the need for local, rather than nationwide guidelines for improving passive building survivability.

ORD Lead Leaders and Guidance

As all of you are well aware, there's growing attention to the challenges of Lead (Pb) in communities around the country and with that, EPA's role in addressing these challenges. NERL's Dr. Valerie Zartarian is now serving in the Pb Executive lead role for ORD (i.e., ORD's Pb science lead) as well as EPA co-chair of the Federal Lead Strategy (FLS) research component. In her ORD and FLS roles, she is the primary POC for all things Pb in ORD and responsible for keeping all apprised of the status of research being conducted to fulfill ORD's commitments. Valerie will be working closely with the scientific staff responsible for conducting Pb research. In addition, she will work to communicate across ORD to help facilitate timely and responsive delivery of Pb research products to our stakeholders. NCER's Dr. Michael Hiscock is providing critical support to Valerie and assisting with cross-ORD coordination. Valerie and Michael are coordinating closely with OSP, and are coordinating closely with OSP on responding to requests from EPA Program and Regional offices, as well as with the ORD communications team. Given the high interest in this topic we need to all stay informed about Pb related work and make sure we do not surprise EPA, state, and tribal partners with our activities and our results.

- It is the Executive Lead's role to determine whether planned Pb research activities meet one or more of the Agency's commitments for its mission and/or part in the Federal Lead Strategy. Accordingly, any new Pb related research activity must receive concurrence from Valerie Zartarian before the work can begin.
- Laboratory/Center management will inform PLs/MIs/NRPs of any delays or impacts to current or planned research products as a result of any new Pb work.

- Laboratory/Center management will ensure that Valerie Zartarian and Michael Hiscock are notified at least 2 weeks in advance of any Pb planned presentations within or outside of the EPA.
- All Pb media inquiries must be cleared with Lahne Mattas-Curry and Megan Maguire (please copy both).

All Pb related work products are by default High Visibility as defined by ORD Peer Review Guidance. As such, they need to go through the IOAA Advanced Notification before clearance in STICS. This includes manuscripts, papers, abstracts, and presentations (even if the same talk was previously cleared for another purpose). All Pb research needs to conform to standard ORD expectations for high visibility products including having a QAPP in place before work is initiated, appropriate QA level, QA documented/updated as you go; ScienceHub should be up-to-date for manuscripts; factsheet should be developed concurrently with clearance package; and products should be cleared through STICS.

In the Office:

ORD Has a New Lean Manager

Janice Brown has accepted a detail to work directly with Chris Robbins and others across ORD in implementing Lean management within ORD. Janice has 34 years of experience with EPA including 14 years in the lab and 20 years on the administrative side of the house. During her career, Janice has participated in several large projects including the successful consolidation of the Reproductive Toxicology Division onto the RTP campus. Janice has been ORD's Lean Advocate for a few years, helping with the strategic deployment of Lean and providing ongoing representation to the Agency's Lean Advocates team. Janice will initially work with ORD's Lean Management System (LMS) team to begin implementation of LMS. She will report to the IOAA to position her to develop overall ORD strategies and monitor adoption and implementation of LMS across our organization. OPARM will continue to be key players in LMS by developing and refining strategic and mission measures. OPARM will also continue to provide data capture and analysis of the metrics, which will ultimately identify areas of operations that need improvement. Janice will reach out to many others in ORD as we further develop our plans for moving forward and deploying LMS to all parts of our organization. Please join me in congratulating Janice as she takes on this challenging and important effort.

It's Time for Another Hatch Act Update

All EPA employees are subject to the Hatch Act, which regulates "political activity," meaning any activity that is directed at the success or failure of a candidate for partisan office, a political group, or a political party. As federal employees, we face certain constraints on our political activity. Check out this helpful Hatch Act chart to see how it applies to you. It's important to remember that some of the Hatch Act restrictions apply 24 hours a day/7 days a week, *even when we are acting in our personal capacities*. Most employees can *never ever* engage in political activity while in a federal room or building or while they are working. This prohibition extends to your telework site during the time that you are actually teleworking.

Recently, the Office of Special Counsel (OSC) – the independent agency that oversees the Hatch Act -- issued updated guidance that Donald J. Trump is officially a candidate for reelection. Because EPA employees are prohibited from engaging in political activity while on duty or in the federal workplace, the President's status as a candidate affects what activity is permissible in the workplace. Whenever you are on duty or in the federal workplace, you cannot engage in activity that expressly advocates for or against President Trump's reelection. This prohibition on political

activity at work or in the federal workplace also extends to in-person communications with others, so employees and especially supervisors are urged to exercise extreme caution when sharing their personal political views.

OSC also issued two very helpful "Hatch Act and Social Media" documents: the Hatch Act Guidance on Social Media. This revised guidance features a number of real world examples to illustrate how social media and the Hatch Act intersect, while the OSC's new-for-2018 Social Media Quick Guide is an easy-to-read reference. For more information about the Hatch Act, visit the OGC/Ethics intranet site or the Office of Special Counsel's site (www.osc.gov). You can also consult your deputy ethics official, regional ethics counsel, or the OGC/Ethics office. You can also send a message to OGC/Ethics at ethics@epa.gov.

Accolades:

High Rate of Downloads for ORD Children's Lead Exposure Article

The NERL-led ORD publication, *Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health Decision-Making*, by Valerie Zartarian, Jianping Xue, Rogelio Tornero-Velez, and James Brown, was published September 2017 by the journal, *Environmental Health Perspectives*. In the 8 months since publication, the article has been downloaded nearly 7,500 times. The journal reports that this makes it the 17th most accessed research paper published by *Environmental Health Perspectives* since 2009.

NRMRL Research Cited in State Rulemaking

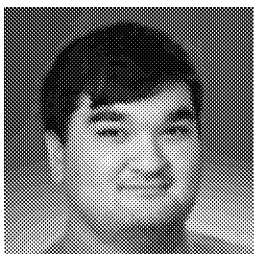
A paper authored by David Wahman and Jonathan Pressman (published in *Journal of the American Water Works Association* in 2015), "Distribution System Residuals—Is 'Detectable' Still Acceptable for Chloramines?," was cited in a recent Pennsylvania Environmental Quality Board amendment to surface water treatment regulations regarding monitoring and reporting. The purpose of this rule is to protect public health through a multiple-barrier approach designed to guard against microbial contamination.

ASPHH Fellow Wins STEMmy Award

ASPPH Environmental Health Fellow, NHEERL's Jenna Hartley, MPH, was chosen as a winner at STEM in the Park's 3rd annual STEMmy Awards. Jenna was nominated by NHEERL's Ferdouz Cochran for one of the two STEM Volunteer of the Year awards. Jenna is being recognized for her outstanding achievements in STEM outreach. Jenna is mentored by Laura Jackson and the EnviroAtlas team.

Son of NERL Employee Accepted to Medical Scientist Training Program

Arthur de la Cruz-Lynch, son of Armah A. de la Cruz, PhD, NERL, has been accepted to the University of Minnesota Minneapolis Medical School, Medical Scientist Training Program (MSTP), M.D.-Ph.D. dual-degree. Trainees appointed to an MSTP grant receive a stipend and tuition allowance for 8 years. As a physician scientist, Arthur plans to specialize in cardiology. Arthur received his bachelor's degree in Health Sciences-physiologic track (minor in medical sciences) at the University of Cincinnati on May 2017. He finished his undergraduate degree in 3 years & graduated summa cum laude. He has been working as a researcher at the Center for Autoimmune Genomics and Etiology, Cincinnati Children's Hospital Medical Center since his freshman year. He just turned 22 years old on Saturday, May 12. Congratulations!



In the News:

California Freshman Wins Patrick Hurd Award for Microplastics Project

Yesterday, EPA announced Melanie Quan as the winner of its "Patrick H. Hurd Sustainability Award." Melanie's project is titled "Microplastics, Macro Problem: A Novel Technique to Remove Microplastics from Water Using a Modified Electrostatic Filter." She creatively applied a remediation technique for particulate matter to an aquatic environment. Melanie, a freshman at Las Lomas High School in Walnut Creek, CA, was selected from among 1,793 student scientists and engineers competing in the Intel International Science and Engineering Fair (Intel ISEF) in Pittsburgh, PA, last week. Melanie's research sought to filter microplastics (smaller than 5mm) using sustainable, low-cost technology in a design that could be applied to address the sources of microplastics in our waterways. By applying technology used to remove particulate matter (the electrostatic smoke precipitator), Melanie developed a novel microplastics filtration system with a variety of applications to minimize microfiber from laundry loads to commercial or industrial uses. The filter, a proof-of-concept research project, uses the concepts of ionization and attraction to efficiently remove microplastics from water sources. Intel ISEF, a program of the Society for Science & the Public, is the world's largest pre-college science competition. Since 2009, the EPA Patrick H. Hurd Sustainability Award has funded the student winner and a chaperone to participate in, and display the student's project at, the EPA's National Sustainable Design Expo, featuring the People, Prosperity, and the Planet (P3) Student Design Competition for Sustainability. Local outlets in California covered the story including SF Gate and Patch.com.

In the Community:

EPA-Cincinnati Outreach

Last week, EPA Cincinnati's Adopt A Class 5th grade science class came to visit their mentors at the EPA office. The students participated in a game in which they learned how much water is used during daily activities, such as washing dishes, watering the lawn, and brushing their teeth. Mentors escorted their students around the building to demonstrate the different energy saving and environmental friendly features, such as the green roof, dual flushing toilets, and permeable pavement. The students were also provided laboratory tours of the premise plumbing system and the electron microscope. During lunch, students and mentors were able to interact for one more final time this school year. This was an opportunity for EPA mentors to showcase the type of research occurring in our labs.



Adopt a class group photo



Students with EPA researcher Steve Harmon



Christy Muhlen displaying the corroded iron pipe from a drinking water system

NRMRL Mentoring Students for LEGO League Competition

Last week, a group of six local middle school students and their mentors visited EPA-Cincinnati and met with Hodon Ryu, Jill Hoelle, and Julius Enriquez. The students are competing in the FIRST® LEGO® League Global Innovation Award competition. The LEGO® League is a competition for elementary and middle school students that challenges them to create science and engineering solutions to real-world problems. The team's project, the "U-Veggie," is a household device that uses ultra-violet light to kill microbes on produce. NRMRL scientists provided advice on how the students can improve their technology and pointers on how to present it during the competition at San Jose State University on June 19-21.

EPA-RTP STEM Outreach Program

- Today, NERL's Kelly Witter will participate in a Business Advisory Council meeting at Durham's Southern School of Energy and Sustainability. The council brings together regional businesses to help expose students and educators to career opportunities, often

through site field trips and guest speakers. Also today, several EPA-RTP employees will help lead students from Durham's Hillside High School in "The Reality of Money". This is a financial education simulation that helps students learn about the impact of their choices as it relates to their budget and lifestyle.

- On Thursday, the program will provide feedback on student poster presentations during the STEM Academy Symposium at Athens Drive High School in Raleigh.

Faces of ORD: IOAA's Danielle Pope



Name: Danielle Pope

Job/Position: Management and Program Analyst

L/C/O or Program: IOAA, currently on detail to OSA in Washington, DC

1. When did you start at EPA? Ironically I started the EPA on earth day in 2012! I joined the EPA after 13 years as a Marine.

2. What's the most interesting thing about your job? The most interesting thing about my job is working with Physical Scientists and actually seeing first-hand how passionate they are about the environment.

3. What's the most interesting thing in your workspace? The most interesting thing in my workspace is a picture of the word LOVE and the "O" is globe of the world, given to me by Liz Engebretson, the HRO for SSC-LV.

4. What's your favorite thing to do? Interacting with employees within the Agency. I love being the go-to person!

5. What's your favorite lunch spot? Market to Market!! I love the liver onions and dim sauce with white rice!

6. If you could have one superpower, what would it be? I would cure cancer. I lost my uncle two years ago in March.

7. What is your favorite movie? It's a Wonderful Life.

8. Describe any steps you take in your daily life to protect the environment: I take the metro to work, I recycle at home, and I purchase non-BPA products--especially water bottles!